"E-government"
The New Frontier for Improving Public Services

*Electronic government—the far-reaching potential of the Internet to improve government services and enhance citizen outreach—was explored at a recent Pioneer Forum. Speakers were Massachusetts Secretary for Administration and Finance **Stephen Crosby**, a former high-technology business executive who is overseeing the Commonwealth's "e-government" efforts, and **Janet Caldow**, executive director of the IBM Institute for Electronic Government, a resource for government in developing strategy, policy, and implementation of electronic services. An edited transcript of their presentations follows.*

Revolutionizing the Delivery of Massachusetts State Services

Massachusetts Secretary for Administration and Finance Stephen Crosby.

Stephen Crosby: The Governor and Lieutenant Governor hired a businessperson as Secretary of Administration and Finance in part to further the Internet-enabling or "e-governmentization" of Massachusetts. There were some initiatives already going on, but they understood that to maximize the e-government benefits for the Commonwealth of Massachusetts meant much more than merely transferring information from one point to another. It meant more than having transactions available over the Internet, which we were already doing quite well, particularly in the Department of Revenue and the Registry of Motor Vehicles. It meant, instead, to go to a whole other level, to create a cross-agency—statewide, not just executive branch—"enterprise portal" that would make access to government services available on a task basis, not an agency basis. The idea is not, "I need to go to this agency or that agency" but "I need to get this problem solved." And through the Internet, you can transparently make available to the consumer all the agencies' services and solve whatever the particular problem is.

This is an opportunity to revolutionize the delivery of services for state government. Without having to go through the political wars of fighting bureaucracies and fighting line-item constituencies and fighting legislative vested interests and fighting advocacy groups, an enterprise portal can move us out of the vertical agency-by-agency mentality and into a horizontal, function-based approach to government.

I want to give you a couple of examples of what it means to transform state government by way of a comprehensive enterprise portal:

• Say you want to start a business in Massachusetts. You click on an icon that says "starting a business" and immediately have at your fingertips a full menu of state services and related sites. You can file business permits, apply for corporate tax status, access state and federal start-up loan programs, register for unemployment insurance, search for real estate, and access job banks and placement firms. And you can do all of this without knowing the agencies involved—Department of Revenue, the Registry of Motor Vehicles, the Department of Employment and Training, Department of Labor and Workforce Development, Department of Economic Development, and so forth. Now if you wanted to start a business without the portal, you would have to call every single one of those agencies, or go to every single one of those agencies. You can go insane trying to start a business that way.

• Say a low-income single mother of a young child is looking for help. We talk constantly about the need for such a citizen to get access to services. Under this initiative, she clicks on an icon of young children. And again, the full range of state and related services appears. You can apply for a state childcare subsidy, enroll your child in a pre-kindergarten program, sign up for WIC, review the child support payments that you're receiving, apply for AFDC benefits. And you can do it on your lunch hour, at a home computer in the evening, or at a library, never knowing the agencies involved.

The goal is to make state services available to you from the standpoint of what you want to do. It will require a vast reorganization of the state along functional lines to be able to offer these services to businesses, other government agencies, cities and towns, and individual citizens through a transparent, easy-to-use, carefully branded and marketed enterprise portal.

Making It Happen

That's the end point. Getting there is something less than simple. At the Governor and Lieutenant Governor's direction, we have designed a comprehensive four-step process by which we will get there. First, we formed an 80-member taskforce, which was designed to get buy-in and participation not only within state government but from constituent groups with whom we interact. It includes members from the private sector, which as we understand it, is somewhat unusual. The co-chairs are the Governor and Bob Davis, the CEO of Lycos. And there are strategically placed private sector members to "leaven" the thought process so we're not just state personnel talking to ourselves. The taskforce also represents all branches of government. The legislature is involved as are the judiciary, Secretary of State, Treasurer, Attorney General, and so on. The effort is across all government agencies because this is meant to be an enterprise wide portal for all the services of state government.

Second, through a competitive process, we hired an outside consultant, Andersen Consulting, which has been able to help us to envision what we can do, to design the process of bringing these kinds of services to state government, and finally, to anticipate the barriers to making this happen since they've done this and are doing this in other states across the country.

To access the various Massachusetts state services that are currently online, go to **www.state.ma.us/app.htm**.

E-governmentization of Massachusetts means creating a cross-agency enterprise portal that would make access to government services available on a task basis, not an agency basis.

Governor Cellucci is driven in part by the potential savings, but he also understands the calcification that has come to state government by the "smokestack-based" delivery of services. The person who's trying to start a business finds it very daunting to go through the vertical process with its utterly irrational disregard for his or her actual needs.

Third, we've gone through what we call an "e-diagnostic" process. Representatives from our Information Technology Division and Andersen are meeting with all the key members, executives, and information officers in state government, starting with the Governor and Lieutenant Governor, both of whom have already had hour-long interviews. They are asking the interviewees what they would like to get out of e-government, who their primary constituents are, which agencies they relate to, and so forth.

Fourth, once we understand who does what, who would like to do what, and which agencies are ready—psychologically and technologically—to move forward, we'll take all this diagnostic information and determine an "e-strategy"— the steps we must take to institute a comprehensive revolution of e-government in Massachusetts. We expect the first 10 to 15 initiatives of this e-strategy will be selected soon. We will then invest quite heavily—we're anticipating investing as much as $60 million to get the first round of e-government initiatives under way.

Anyone who has heard the Governor recently knows that he is very serious about this. Needless to say, Paul Cellucci is driven in part by the potential savings, which are near and dear to his heart. But he also genuinely understands the calcification that has come to state government by the "smokestack-based" delivery of services. You've got this agency and this agency and this agency and so on, and even though they all deliver services that are related to one another, the single mother, the person who's trying to start a business, or the government official from a small town in western Massachusetts trying to access state programs finds it very daunting to go through the vertical process with its utterly irrational disregard for his or her actual needs.

Janet Caldow, director of the IBM Institute for Electronic Government.

Going Beyond Government Services on the Web

Janet Caldow: I'd like to stretch your thinking a little bit. I use a very broad definition of e-government. If you define e-government as just putting services online, you're going to miss a bigger picture. How your state positions itself, your businesses, and your citizens for the future is what's going to set you apart. And I can tell you there are 49 other states all looking at the same thing.

For every state, economic competitiveness and education are critical; they're the top priorities of every governor. The Information Technology Association of America just reported there are 10 million jobs associated with the Internet and some 850,000 vacancies. We are not producing knowledge workers with the right kind of skills fast enough to keep up with the demand. Since you don't have to live where you work anymore, these jobs can go anywhere in the world—India, Brazil, Germany—and many countries are banking on that. The fact is governments all over the world are looking to position themselves for competitive advantage. I know several governments which have actually hired Madison Avenue advertising firms to build their brand image on the Internet.

This is important because if an Internet start-up company has to be up and going in 90 days, and it takes 120 days to approve a building permit or some other transaction with government, they're going to look elsewhere, and they do. One of the first places high tech companies look is a government's web site to see if they "get it."

Financial Considerations

So we are seeing some very aggressive targets in the states for online government services. In Maryland, the legislature has mandated something like 65 percent of services online by 2002, and 85 percent by 2003. It's happening because people are demanding it, but also because the cost savings are very real. Arizona has been renewing vehicle registrations for a couple of years now online. They did an activity-based cost study. It cost them $7 to renew one registration over the counter by traditional means and $1.60 over the Internet. The typical government has from 50 to 70 agencies; the potential savings are huge.

If you define e-government as just putting services online, you're going to miss a bigger picture. How you position your businesses and citizens for the future is what's going to set you apart.

Typically the first set of services to go online are the ones that will deliver the cost savings to help fund the next set. Some states are putting what they're saving into a statewide innovations fund that is managed in order to help fund the next one. Once you have the infrastructure set in terms of all the citizen services—renewing licenses and paying fines and so forth—and the government-to-business services, the marginal cost of adding something becomes very small. At some point, you're going to come down to the ones that may not save you much money, but aren't going to cost you much to put online either. Local governments, for example, can begin to put things online like signing up for soccer camp or Meals on Wheels.

E-government spending is expected to quadruple from about $1.5 billion today to over $6 billion in 2005. That's a lot of money, and it's money that needs to be invested wisely. That's why it's important to make sure that decisions are made correctly and for the most impact.

The City and County of Honolulu's website is **www.co.honolulu.hi.us/menu/government/.**

As for funding issues, revenue from fees and advertising is possible. Honolulu is selling banner advertising on its site, and New York was looking at it. Businesses are looking at per-transaction fees. Texas is selecting which agency and which service goes online based on the funding contribution. The trend is toward self-funding models.

Helping Government by Helping Business

Streamlining business-to-government transactions via the Internet is important, since business has fairly constant contact with government, but I emphasize to governments, don't stop there. The big piece here is encouraging small and medium-sized companies to become e-businesses. That may take some kind of aggregation. I think Minnesota is trying to get some 600 cities to pull together for the bargaining power they'll have in terms of telecommunications and high bandwidth, as well as having their websites hosted and developed.

Once all these small/medium-sized companies are online, the next problem is getting people to access them. Study after study shows that people want to do business online, but they want to do business locally because if there's something wrong, they still want to be able to drive there or pick up the phone and talk to someone and get it resolved.

It's hard to find a local company through a search engine—you're likely to get 200,000 "hits" and not go past the first page of them. I live in Virginia. If I buy a book from Amazon, I'm not paying sales tax because they don't have a physical presence in the state. They're not employing Virginians, they're not paying state corporate income tax or licensing fees, their employees aren't shopping at the local malls. There's a lot

of economic growth in that one purchase that could stay in Massachusetts if you encourage and help your citizens to buy from Massachusetts e-businesses. There's so much talk about Internet taxation, but it's really the tip of the iceberg in terms of online purchases.

Rekindling Democracy for the 21st Century

I think we'll see online voter registration first, then electronic voting at the polling place (before you see Internet voting because of the public access issues). In view of what happened in Florida in the presidential election, you can have a picture of a candidate and a little message box pop up that says, "Are you sure?" The benefits, of course, are the same that we've seen in the private sector and in other areas of the public sector—speed, accuracy, convenience, and cost saving.

With electronic voting, you can have a picture of a candidate and a little message box pop up that says, "Are you sure?"

Opening the legislative body is another part of this. Scotland just got its first parliament in 300 years, and they want it to be a model of digital democracy for the world. Right now most legislative sites are pretty good; you can look at bills, amendments, who expert witnesses were, and so forth. But it's always after the fact. What Scotland wants to do is open that process, so even an individual parent concerned about, say, the teenage driving age can have his or her input known at the time the deliberation on a bill is going on.

Looking Toward the Future

Believe it or not, we're at less than 3 percent of where the Internet's going to be; in terms of content, speed, bandwidth, the number of uses, number of devices, number of applications, it's moving very quickly. The high bandwidth that's coming will really change things. Web casting will become easier, and accessing video will be just as easy as turning on your television set. You'll be able to manipulate video the same way you do any kind of data today; you'll be able to do search and retrieval by content, for example. If you're filling out an online form for starting a new business or buying hardware, and say, "I have a question," you can click and have a government employee or customer service representative show up on your screen and help you through it. They can read what you're doing, exactly where you are, and work from there.

We're not talking about a PC connected with wires—it's going to be a wireless, hand-held combination camera, TV, phone, and PC. A Department of Transportation worker could be holding one out at the Big Dig and have the contractor, who might be two or three states away, on the video screen. Or a Department of Transportation supervisor a couple of counties away could be streaming video of a piece of bridge or work in question back to the engineers who could make construction changes right there on the site. Imagine, your screen is split and you can see four or six people—it's more than videoconferencing, though that's the best word we have for it today. You can share engineering drawings on that same screen. Social workers out in the field or state troopers can use the same kind of technology.

Things are moving very quickly. "Don't go where the puck is; go to where it's going to be."

So my message to you is that it sounds like you're off to a great start, but don't stop there because your competitive advantage is going to come from where you are in the future. Things are moving very quickly. "Don't go where the puck is; go to where it's going to be."